CLAIMS

Add A1

1. Continuously variable electromagnetic transmission, including a commutator-less, axial flux dynamoelectric machine (3) provided with an input shaft (2) and an output shaft (4), and means (20) for controlling and supplying electric power at a variable frequency to said machine, the dynamoelectric machine including a first rotor (12) connected to the input shaft, a second rotor (15) connected to the output shaft and a stator assembly (16), the two rotors and the stator assembly being formed by discoid elements (A - J), the stator assembly and at least one of the rotors having respective active elements provided with windings connected to the control and supply means and arranged to interact with the other rotor by means of magnetic flux through air gaps including axial air gaps between respective discoid elements of the rotors and the stator assembly, the transmission being characterised in that it includes displacement means (84-89; 110-113) for axially displacing at least one (81, 82) of the discoid elements to modify the width of the axial air gap (90, 91) between this element and an adjacent discoid element (80).

2. Transmission according to claim 1, characterised in that the discoid elements include at least one reactive element.

3. Transmission according to claim 2, characterised in that said reactive element is a synchronous permanent magnet type element.

4. Transmission according to claim 2, characterised in that said reactive element is an asynchronous type element.

5. Transmission according to claim 1, characterised in that the first and/ or second rotor and/or the stator assembly include at least two discoid elements.

6. Transmission according to claim 1, characterised in that the displacement means include an axial screw mechanism (86) driven in rotation by an electric motor (87).

7. Transmission according to claim 1, characterised in that the displacement means include a cam mechanism (110-113) driven by an electric motor (87).

8. Transmission according to any of the preceding claims, characterised in that it includes coupling means (93-95; 99) for mechanically connecting a discoid element of the first rotor (12) to a discoid element of the second rotor (15) in rotation.

9. Transmission according to claim 8, characterised in that said coupling means include said displacement means (84-89; 110-113), the connection between the two rotors being achieved via contact of said respective discoid elements (80-82) of the first and second rotor.

10. Transmission according to claim 9, characterised in that said coupling means include friction pads (99) arranged on mutually opposite faces of said respective discoid elements (80-82) of the first and second rotor.